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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,438

03/18/2004

Stuart M. Davis

DCL2024/M5106

5406

40536

7590

01/11/2008

MR. BARRY D. JOSEPHS
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EXAMINER

MAPLES, JOHN S

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

01/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/803,438

Applicant(s)

DAVIS ET AL.

Examiner

John S. Maples

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-77 ~~is/are~~ are pending in the application.
- 4a) Of the above claim(s) 1-26 and 60-77 ~~is/are~~ are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-59 ~~is/are~~ are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Applicant's election with traverse of Group II in the reply filed on 15 October 2007 is acknowledged. The traversal is on the grounds that the groups are so related that they should not be distinct. This is not found persuasive because, for example, Group III comprises the multiple adhesives in a particular configuration, which limitations are not part of Group II.

The requirement is still deemed proper and is therefore made FINAL.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 27-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27, line 3, both expressions "the majority of" and "the boundary surface of said cell" do not have proper antecedent basis and requirement amendment.

Claims 28-59, dependent on claim 27, fall therewith.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions

covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 27, 28, 30, 42-49, 51, 52, 54-59, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al.-US 4,177,330 ('330) in view of Kilby et al.-US 2003/0180612. ('612)

The '330 patent teaches in Figures 2, 4 and 5 and in column 4, line 15 through column 6, line 2, a primary alkaline cell including an anode and cathode frame 8, wherein the width of the anode frame is as wide as the thickness of the cell-the width being the distance between the distance between the two longer sides of the cell as seen in Figure 4 of '330. The '330 patent provides for alkaline electrochemical systems as set forth in column 4, lines 30-32.

The only claimed feature not taught by '330 is the specific makeup of each of the anode and cathode, the thickness of the cell and the makeup of the current collectors. The '612 publication teaches the claimed anode and cathode mix in the Example therein and to include in '330 each of the mixes of '612 would have been obvious because the same is a mere substitution in the thin cell alkaline battery art and '330 provides for such substitution. It would also have been obvious to have made the cell in '330 thinner so that the same could be utilized in compact environments and the use of the various

recited current collector materials would have been obvious for the known high conductance of these materials.

7. Claims 29, 31-41 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over '330 and '612 and further in view of Kinsman-US 4,098,965. ('965)

The above combination of '330 and '612 teach all of the claimed subject matter except for the adhesive between layers and the plural layers. The '965 patent teaches a thin alkaline battery including electrode frames wherein dual plastic films are placed around the cell using adhesive. To have included in the cell of '330/'612 the films and the adhesive as taught by '965 would have been obvious so that the cell would be protected from the external environment and would not be damaged.

8. Claim 53 rejected under 35 U.S.C. 103(a) as being unpatentable over '330, '612 and '965 and further in view of Rapeli-US 6,103,417. ('417)

The references to '330, '612 and '965 do not teach rivets securing current collector sheets to electrode frames. The '417 patent teach foils in a battery secured via rivets. To have used in the cell of '330, '612 and '965, the rivets of '417 to attach the collectors to the frames therein would have been obvious to provide a more secure fit of the layers together.

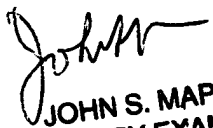
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Friday, 7:00-3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JOHN S. MAPLES
PRIMARY EXAMINER

JSM/1-7-2008